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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,118	10/31/2003	Masayoshi Matsumoto	244780US0	8429
22850	7590	12/15/2004		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ZALUKAEVA, TATYANA	
			ART UNIT 1713	PAPER NUMBER

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,118

Applicant(s)

MATSUMOTO, MASAYOSHI

Examiner

Tatyana Zalukaeva

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1-3, 5-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 3,284,423 to Knapp.

Claims 1-3, 5, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Knapp discloses a pressure sensitive adhesive composition (title) comprising an acrylic copolymer described by the preferred embodiments, such as Examples 1 in col. 2 and 2 in col. 2, 3 and Example 3 in col. 3:

EXAMPLE 1 A solution of 2-ethylhexyl acrylate (60 parts), methyl acrylate (34 parts), acrylic acid (5 parts) and glycidyl methacrylate (1 part) was formed in a 4: 1 ethyl acetate:hexane solvent mixture and polymerized at reflux temperature for 5 hours in the presence of 0.15 part of α,α' -azodiisobutyronitrile. The resulting polymer solution had a solids content of 45% by weight and a Brookfield viscosity of 15,000 centipoises at 25° C. This particular pressure-sensitive resin when coated, and dried could bond "Mylar" polyethylene terephthalate to steel under a constant shear load of 1 lb./square inch at 60° C. Resin exhibited aggressive dry tack which was not noticeably diminished after two weeks under the above test conditions.

EXAMPLE 2 Another polymerization was carried out with the following monomer charge: 65 parts lauryl acrylate, 29 parts ethyl acrylate, 5 parts acrylic acid and 1 part glycidyl methacrylate. The process used was that of Example 1. There was thus obtained a resin solution having a solids content of 55% by weight and a Brookfield viscosity of 10,000 centipoises at 25° C.

EXAMPLE 3 Another resin was made according to the process of Example 1 from a monomer composition consisting of 10 64 parts 2-ethylhexyl acrylate, 30 parts ethyl acrylate, 5 parts acrylic acid and 1 part glycidyl methacrylate.

These compositions are absolutely identical to those recited in the instant claims 1-3, 6 and 8. The limitations of claim 5 is met by the examples above and by description in col.3, lines 60-75. For claim 6, see also col.4, lines 32-45.

With regard to the limitation of molecular weight the rejection is made in the sense of The above rejections were made in the sense of Fitzgerald (205 USPQ 594). (CAFC) based on presumption that the properties governing the claimed compositions, if not taught, may be very well met by the compositions of Knapp, since the compositions of Knapp are identical and made in essentially the same manner as applicants' compositions, wherein the burden to show that it is not the case by presenting a factual evidence is shifted to applicants; or in the sense of In re Spada, 911 F 2d 705, 709 15 USPQ 1655, 1658 (Fed. Cir. 1990), which settles that when the claimed compositions are not novel, they are not rendered patentable by recitation of properties, whether or not these properties are shown or suggested in prior art.

5. Claims 1-3, 5-8 are rejected under 35 U.S.C. 102(b) as anticipated by Mallya et al (U.S. 4,812,541). See Control Examples 5-8 in col. 6, lines 30-40. Ther ratio of monomers for all embodiments of Malya is selected to produce polymers with weight average molecular weights of 200,000-500,000 (col.2, lines 49-55). With regard to claim 7 it is taught by Mallya that the compositions of the invention, including controls were allowed to dwell for 30 minutes at 120°C (see col.3, lines 1-10). This reads on the drying at a temperature between 100-150°C, as per instant claim 7

6. Claim 8 IS rejected under 35 U.S.C. 102(b) as being anticipated by or in the alternative as obvious over Kordzinski et al (U.S. 3,579,490). See example 2 in col.4, for molecular weight limitation, please refer to the rationale applied for rejection over Knapp.

Claim Rejections - 35 USC § 103

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp in view of Bauduin et al (U.S. 6,297,309)

There is no disclosure in Knapp of the stabilizers added to the pressure sensitive adhesive composition. The addition of different stabilizers to pressure sensitive adhesive compositions is notoriously used in the art as clearly stated by Bauduin: **Common** pressure-sensitive adhesives heretofore known include those comprising a rubber-type high-molecular-weight substance as a base polymer, tackifying resin, plasticizer and when required, **stabilizer**, antioxidant, filler, coloring agent and the like (see background in col.1, line 36). In Example 1 or table 2 , wherein the pressure sensitive adhesive is an ethylene/acrylate polymer the use of stabilizer IRGANOX-1010, which is an alkyl phenol stabilizer is described. Therefore, based on the general and routine use of different stablizers in pressure sensitive adhesives, as taught by Bauduin, it would have been obvious to those skilled in the art to employ such in the composition of Knapp in order to improve stability of Knapp's adhesive to oxidation, and thus to arrive at the instant claim 4.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp.

Knapp does not provide the temperature of drying the sheet with pressure sensitive adhesive on it. Knapp suggests that sheets of different materials could be coated with the inventive pressure sensitive adhesives, and suggests that the drying process takes place (see, for example lines 55, 56 of col.2). Thus it would have been obvious to those skilled in the art to find the optimum drying temperature via routine experimentation, taking into account that such temperature is a result effective variable in terms of gelling of the adhesive or formation of "fish eyes" while coating. This rejection is made in the sense of *In re Boesch and Slaney* 205 USPQ 215 (CCPA 1980):

Discovery of optimum value of result effective variable in known process is ordinarily within the skill in the art and would have been obvious.

9. Other prior art references cited in PTOL-892 show the state of the art in acrylic pressure sensitive adhesives.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tatyana Zalukaeva
Primary Examiner
Art Unit 1713

December 10, 2004

